

**IN THE UNITED STATES**  
**PATENT AND TRADEMARK OFFICE**

APPLICANTS: Mark Sandstrom  
APPLICATION NO.: 09/938,014  
FILING DATE: August 24, 2001  
TITLE: SYSTEM AND METHOD FOR MAXIMIZING THE TRAFFIC DELIVERY  
CAPACITY OF PACKET TRANSPORT NETWORKS VIA REAL-TIME TRAFFIC  
PATTERN BASED OPTIMIZATION OF TRANSPORT CAPACITY ALLOCATION  
EXAMINER: Michael J. Moore, Jr.  
GROUP ART UNIT: 2666  
ATTY. DKT. NO.: 23010-11153

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COMMISSIONER FOR PATENTS  
P.O. BOX 1450  
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**REQUEST FOR RECONSIDERATION AND**  
**STATEMENT OF SUBSTANCE OF INTERVIEW**

Sir:

A final Office Action was mailed August 31, 2006, for the above-referenced patent application. The following remarks and Statement of Substance of Interview are submitted herewith, and the examiner is respectfully requested to reconsider the final rejection and issue a Notice of Allowance.

Applicant's representative thanks the examiner for the courtesy of an interview. On October 27, 2006, Applicant's representative Robert Hulse and patent examiner Michael Moore

discussed the pending final rejection in this application — specifically, the application of U.S. Patent No. 6,556,548 (Kirkby) to claims 1-8 in the final Office Action.

In the final Office Action, it was suggested that Kirkby, at col. 16, lines 1-25, discloses the claimed feature: “the capacity of each connection [is] controlled from its destination node based at least in part on the traffic loads associated with the connections configured to transport data to that destination node.” During the interview, Applicant’s representative pointed out that this passage of Kirkby does not actually describe the allocation of either connection capacity or bandwidth. Rather, this passage describes how certain demand information of economic nature is calculated and then shared among the nodes.

As Applicant’s representative further pointed out during the interview, Kirkby describes how bandwidth allocation is made in his system, at col. 5, lines 1-35. Rather than basing the allocation on traffic loads, as claimed, Kirkby allocates bandwidth “so that each resource is divided between those using it in proportion to how much they pay or are willing to pay for their share of it.” (Kirkby, col. 5, lines 6-9.) Specifically, Equation 1 in Kirkby describes how bandwidth is allocated to a particular user. This allocated bandwidth,  $x_i$ , is a function of the total capacity of the resource,  $c_r$ , and the “willingness to pay” values,  $m_i$ , (measured in units of currency) for each of the users requesting bandwidth. Importantly, none of the variables used to determine the allocated bandwidth relate in any way to actual traffic loads. This is because Kirkby is concerned with the economic concept of “proportional fairness” (see Abstract) rather than technical optimization.

During the interview, the patent examiner acknowledged that Kirkby appears not to disclose this claimed limitation and said that he would discuss the issue with his supervisor. The

examiner also suggested that he would do an additional search before issuing any Notice of Allowance in this case.

Based on the foregoing, the application is in condition for allowance of all claims, and a Notice of Allowance is respectfully requested. If the examiner believes for any reason direct contact would help advance the prosecution of this case to allowance, the examiner is encouraged to telephone the undersigned at the number given below.

Respectfully submitted,  
MARK SANDSTROM

Dated: October 30, 2006

By: /Robert A. Hulse/

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